

# **APPENDICES**

**to the SOLEC 98 Conference Proceedings**

# SOLEC '98

## What's it all about?

The Parties to the Great Lakes Water Quality Agreement (the governments of Canada and the United States), want to establish a consistent, easily understood *suite of indicators* that will objectively represent the state of major ecosystem components across all Great Lakes basins and on which they can report progress every two years. This suite of indicators should also be used to assess the Parties regarding achievement of the purpose of the Agreement. The acceptance and use of a core set of indicators will also drive data collection activities throughout the basin.

The first two SOLEC conferences reviewed the state of various components of the Great Lakes ecosystem through the use of indicators and subjective assessments. These indicators were developed through the best judgement of the scientists involved. SOLEC '98 is taking this work a step further and has pulled together a list of ecosystem indicators for *discussion* at the conference.

In addition to the indicator work, SOLEC '98 is also suggesting areas of high biodiversity - worthy of protection, preservation and/or restoration. These *biodiversity investment areas* include aquatics, coastal wetlands and the lands by the Lakes.

# SOLEC '98

## Steering Committee

Steering Committee members represent a wide variety of agencies from around the Great Lakes:

Agency for Toxic Substances and Disease Registry  
 Council of Great Lakes Industries  
 Environment Canada  
 Great Lakes Commission  
 Great Lakes Fishery Commission  
 Great Lakes States  
 (Michigan, Minnesota, New York, Pennsylvania)  
 Great Lakes United  
 Health Canada  
 International Joint Commission  
 Ontario Ministry of Agriculture, Food & Rural Affairs  
 Ontario Ministry of Environment  
 Ontario Ministry of Natural Resources  
 U.S. Environmental Protection Agency  
 U.S. Fish and Wildlife Service  
 U.S. Geological Survey

*There are many other individuals, and representatives from environmental groups, academia and the local level of government who have participated in the work necessary to develop this conference.*

For additional information please contact:

Office of Regional Science Advisor  
 Environment Canada - Ont. Region  
 867 Lakeshore Rd.,  
 Burlington, Ontario L7R 4A6  
 ph: 905-336-6270

Great Lakes National Program  
 Office - US EPA  
 77 West Jackson Blvd.,  
 Chicago, IL 60604  
 ph: 312-886-4360

# SOLEC '98

## State of the Lakes Ecosystem Conference

Great Lakes Indicators and  
Biodiversity Investment Areas



October 21, 22, & 23, 1998

Buffalo Convention Center

Buffalo, New York

Hosted by:

Environment Canada  
 &  
 United States Environmental  
 Protection Agency

**Tuesday October 20, 1998**

An evening reception will take place in the lobby of the  
Buffalo Convention Center

Hor d'oeuvres provided - Cash bar

*Sponsored by Great Lakes Commission*

**DAY ONE - Wednesday October 21, 1998****8:30 Welcome / Opening Remarks****9:00 Presentation of Indicators List by Subject Groups:**

- Nearshore & Open Waters
- Coastal Wetlands
- Land by the Lakes
- Socio-Economics / Land Use
- Stewardship
- Human Health

*30 minute break is scheduled at 10 am.*

**12:00 Lunch**

Guest Speaker: William Rees, Univ. of B.C.,  
"Our Ecological Footprint"

**2:00 Workshops: Indicator Subject Groups**

**& 4:00** Resource people will be available at each workshop to explain the SOLEC Indicator List in more detail. Participants may select two different workshops.

*30 minute break at 3:30 pm. Adjourn at 5:30 pm.*

**6:30 Evening Reception**

In amongst the displays.  
Hot hors d'oeuvres provided. Cash Bar

**DAY TWO - Thursday October 22, 1998****8:30 Plenary Session: State of the Lakes**

This session will update the information presented at SOLEC '94 and SOLEC '96 and in the corresponding States of the Great Lakes reports.

**9:00 BIA Presentations:**

Highlights of the papers will be presented for

- Aquatic
- Coastal Wetlands
- Land by the Lakes

*30 minute break is scheduled at 10 am.*

**10:30 Workshops: Lake-by Lake Sessions**

The intent of these sessions is to discuss the applicability of the SOLEC Indicators to each lake. These sessions are being run in conjunction with the LaMPs (where applicable). There will also be a session for the St. Lawrence River.

**12:00 Lunch**

Guest Speaker: Dave Bennett, Canadian Labour Congress, "Just Transition"

**1:30 Workshops: Lake-by-Lake and BIAs:**

These sessions will discuss the lakes (see 10:30 timeslot) and will also discuss the findings of the Biodiversity Investment Area papers. Where the right areas selected? Did we miss a special area? What are the implications of selecting an area?

**3:30 Field Trip or SOLEC 5 km Fun Run**

Visit some of Buffalo's restoration sites or be really active and participate in the SOLEC 5 km Fun Run!

**7:00 Dinner**

Guest Speaker: Hays Bell, Eastman Kodak,  
"Environmental Responsibility"  
Success Story Recognitions

**DAY THREE - Friday October 23, 1998****8:30 Plenary Session****8:45 Workshops: Cross-Cutting Issues**

These sessions will discuss the cross-cutting issues. These include:

- IJC indicators work
- Citizen's indicators
- Modelling summit
- Endocrine disruptors
- Volunteer monitoring
- Applying indicatorsRAP perspective
- Next generation indicators
- Fish community objectives

**11:45 Feedback for the Future - Students Perspective of SOLEC 98****12:15 Closing Plenary - Where do we go from here?****12:30 Conference adjourns*****Please note:***

The display area will be open for viewing throughout the day on Wednesday and Thursday.

Registration Tuesday October 20, 6:30pm-9:00pm  
or

Wednesday October 21, 7:30am-12noon

For further information on SOLEC visit our web site at <http://www.cciw.ca/solec/>

## **Appendix B. Core Group Leaders and Biodiversity Investment Area Paper Authors**

### **Indicators Core Group**

|                          |   |
|--------------------------|---|
| Co-Chairs:               | Paul Bertram (U.S. Environmental Protection Agency)<br>Nancy Stadler-Salt (Environment Canada)                                  |
| Nearshore & Open Waters: | Tom Edsall (U.S. Geological Survey)   |
| Coastal Wetlands:        | Lesley Dunn (Environment Canada)<br>Duane Heaton (U.S. Environmental Protection Agency)<br>Nancy Patterson (Environment Canada) |
| Nearshore Terrestrial:   | Ron Reid (Bobolink Enterprises)<br>Karen Rodriguez (U.S. Environmental Protection Agency)                                       |
| Land Use:                | Ray Rivers (Rivers Consulting)  |
| Human Health:            | Doug Haines (Health Canada)<br>Mark Johnson (U.S. Environmental Protection Agency)  |
| Stewardship:             | Ron Baba (Oneida Nation)  |

### **Biodiversity Investment Area Paper Authors**

|                        |   |
|------------------------|---|
| Nearshore Terrestrial: | Ron Reid (Bobolink Enterprises)<br>Karen Rodriguez (U.S. Environmental Protection Agency)   |
| Coastal Wetlands:      | Dennis Albert (Michigan Natural Features Inventory)<br>Pat Chow-Fraser (McMaster University)  |
| Aquatics:              | Joe Koonce (Case Western Reserve University)<br>Ken Minns (Fisheries and Oceans Canada)<br>Heather Morrison (Fisheries and Oceans Canada) |

## Appendix C. Participant Profile

### Participation by Country

| Country       | Number of Registered Delegates | Percent    |
|---------------|--------------------------------|------------|
| United States | 253                            | 59.25      |
| Canada        | 171                            | 40         |
| Mexico        | 1                              | 0.25       |
| Sweden        | 1                              | 0.25       |
| Lithuania     | 1                              | 0.25       |
| <b>Total</b>  | <b>427</b>                     | <b>100</b> |

### Participation by Sector

| Sector   | Number of Registered Delegates | Percent    |
|--|--------------------------------|------------|
| Federal Government                             | 154                            | 36.07      |
| Provincial / State Governments                 | 60                             | 14.05      |
| Academia / Research                            | 38                             | 8.9        |
| IJC  | 32                             | 7.5        |
| Industry                                       | 30                             | 7.0        |
| Environmental Groups                           | 20                             | 4.68       |
| Municipal / Regional Governments               | 19                             | 4.45       |
| Recreation / Wildlife / Conservation / Fishing | 18                             | 4.2        |
| Native / Aboriginal Groups                     | 10                             | 2.34       |
| Public Advisory                                | 10                             | 2.34       |
| Health   | 5                              | 1.17       |
| Media  | 4                              | .94        |
| Agriculture                                    | 2                              | .47        |
| Other  | 26                             | 5.85       |
| <b>Total</b>                                   | <b>427</b>                     | <b>100</b> |

# Appendix D. Student Presentation/Great Lakes Student Summit

## Student Presentation

Students and teachers from local area schools were invited to SOLEC 98 to participate in the plenary sessions and workshops, and were asked to present their perspective to the SOLEC delegates at the closing plenary session. The students read from a vision statement that had been presented at the IJC Biennial Public Forum. Student involvement evolved from their participation in the Great Lakes Student Summit - a program of the Erie County Department of Environment and Planning.

Participation from the East Aurora School District included: **John Newton** (teacher), **James Ricci** (5<sup>th</sup> grade), **Cindy Cicarell** (5<sup>th</sup> grade), **Nathan Newton** (5<sup>th</sup> grade), **Angela Barranello** (5<sup>th</sup> grade), and **Aren Hall** (11<sup>th</sup> grade). Participation from the West Seneca School District included: **Gail Hall** (teacher), **David Walter** (5<sup>th</sup> grade) and **Kristina Czechowski** (5<sup>th</sup> grade).

## About the Great Lakes Student Summit

The Great Lakes Student Summit (GLSS) began in 1995 as an opportunity for students in grades 5-9 from throughout the Great Lakes basin to learn about environmental issues affecting their communities (and have fun at the same time!). Over 250 students and teachers participated.

The second GLSS, held in 1997 involved more than 275 students and teachers from the US and Canada. Project exhibition ranged from posters outlining pollution prevention strategies, to skits detailing environmental awareness and even a full-scale functional watershed model!

The highlight of the 1997 event was the development and presentation of a vision statement for 2022. This vision statement was then officially presented at the IJC Biennial Public Forum held in Ontario, Canada.

The theme for the 1999 summit, "Your Concerns, Our Concerns, Areas of Concern", focuses on environmental issues facing the Great Lakes states and provinces and is designed to motivate student interest and involvement in their local communities. As with the past two Summits, students will have an opportunity to showcase research and environmental projects they are involved with in their areas of the Great Lakes basin.

The Summit will feature several field trips that are designed to educate the students about the geological, biological and chemical make-up of the Great Lakes ecosystem.

The ultimate goal of the 1999 GLSS is to encourage students to utilize their education and experiences gained at the Summit and apply these new-found skills and knowledge back home. By teaching children to take "ownership" and promote stewardship of their watersheds in their communities, we are giving them the personal responsibility of protecting the Great Lakes resource and almost guaranteeing Great Lakes protection into the future.

## Appendix E. Keynote Speakers

### Welcoming remarks - *Wednesday October 21, 1998*

- Paddy Torsney, Government of Canada
- William Muszynski, Deputy Regional Administrator, EPA Region 2

### Lunch Speaker - *Wednesday October 21, 1998*

#### **William E. Rees, PhD**

University of British Columbia

#### **"Where On Earth is The Great Lakes Basin?"**

##### **Abstract**

Ecosystems management in the Great Lakes Basin (GLB) should begin by recognizing that human beings are the region's dominant consumer organism and that they greatly affect the structure and function of their supportive ecosystems. This paper estimates the total load imposed on these ecosystems by the human population of the GLB using 'ecological footprint (EF) analysis.'

EF-analysis is an extended form of trophic analysis. It assesses not only total metabolic requirements of the region's human population, but also its 'industrial metabolism' and converts relevant material and energy flows to a corresponding ecosystems area. Thus, the ecological footprint of the GLB human population is the total area of terrestrial and aquatic ecosystems required to produce the resources consumed and to assimilate the wastes produced by that population.

This approach shows that the average per capita eco-footprint of GLB residents is between seven and ten hectares. Assuming a population approaching 40 million, the total eco-footprint of the region may therefore be as high as **four million square kilometres**. This is five times larger than the geographic area of the basin itself, or approximately half the area of the lower 48 states. In terms of their ecological impacts, the residents of the GLB thus 'live' mostly outside the region. The sustainability of the region's human population and lifestyles therefore depends more on sound management of ecosystems outside the basin than on the internal management regime. Similarly, exemplary management efforts to improve GLB regional environmental quality may actually reduce global sustainability if the effect is to further off-load the impacts of local consumption (eg. further extend the region's ecological footprint) onto ecosystems elsewhere in the world.

For further information on Ecological Footprint Analysis, Dr. Rees has published several articles on the subject, as well as the following book:

Mathis Wackernagel and William Rees. 1996. Our Ecological Footprint: Reducing Human Impact on the Earth. New Society Publishers. 176 pp.

## **Lunch Speaker - Thursday October 22, 1998**

### **Dave Bennett**

Director, Health and Safety, Canadian Labour Congress

#### **"Just Transition"**

The Canadian Labour Congress (CLC) represents 2.3 million workers in both public and private sectors across Canada. The CLC as a national organization has been on the fringes of consultations over Great Lakes water quality, so this is very much an outsider's view of the drive to clean up the Great Lakes.

The CLC is, however, a regional as well as a national organization. Local unions and Labour Councils have been instrumental in environmental control and remediation measures and they have, above all, taken the lead within workplaces to institute pollution prevention and toxics use reduction measures.

Some of the characteristics of the efforts to improve Great Lakes air and water quality are 1) bold and ambitious aims on the part of the International Joint Commission and its scientific advisory bodies; 2) a long history of the failure of implementation moves on the part of governments at all levels; 3) a focus on zero discharge and the sunseting of selected chemicals as the key to pollution abatement moves; and 4) labour as very much a junior partner among stakeholders.

The "Just Transition" movement arose because of the profound changes in industrial structure that would arise out of a true sunseting program. The status of sunseting programs is less prominent than it was, except that tangible programs are being replaced by chlorine campaigns and the like. Any moves to eliminate chlorine from industrial production would require a very, very strong and comprehensive transition program.

Labour's aim is to make "Just Transition" an integral part of sunseting campaigns and programs. But first some background on transition itself.

Workers have a history of dealing with transition measures through economic conversion schemes that have, among other things, tried to provide compensation, retraining and reemployment for workers displaced from "sunset" industries. These projects and measures had little to do with sustainability, environmental protection or the impact of environmental change on the different industrial sectors.

In North America, transition issues became a reality with proposals to ban, phase out, eliminate or "sunset" specific toxic chemicals or classes of chemicals, such as the ozone depleters, chlorinated chemicals, heavy metals, asbestos, or lists of chemicals such as the "Dirty Dozen" pesticides, all in the name of sustainability, sustainable development, or the protection of ecosystems. Unions developed, and are still developing, an ideology and a program of "Just Transition" to deal with the industrial disruptions caused by the banning of major feedstock or other industrial chemicals. The disruptions would be major and the transition measures to deal with them, ambitious and comprehensive.

Among the options for transition programs are: 1) an equitable program of industrial restructuring and retraining to recruit laid-off workers from the affected industries to the new alternative industries or ventures; 2) a program of retraining and reemployment in the affected



industries, and 3) a placement system inside and outside the affected industries, which may include severance pay, counselling, retraining, adjustment programs, and a placement service. A placement service for laid-off Canadian Steelworkers, for instance, has had a very high placement rate of 85 to 90 percent, the record over income maintenance being somewhat less impressive.

Among the problems associated with the program are that the changes are deep and “societal,” placing a very heavy responsibility on the state for inaugurating and implementing or overseeing the program — all this in a time when the planning functions of governments are under siege. This has led for calls, including from some segments of labour, for modesty in the environmental change program and a corresponding modesty in the transition program needed. There is, for instance, a problem of increasing complexity and difficulty, where the program deals with (i) a single employer; or (ii) an industry with multiple employers, all having a responsibility for transition measures but with uneven responsibilities for implementing the environmental change concerned; or (iii) a whole range of different industries, such as energy producers, some of which gain and others of which lose in the event of major industrial change.

To finance a transition program, a lot of revenue is needed, going into billions of Canadian dollars annually. Among the proposals for revenue raising, to finance transition, advanced by Canadian labour are 1) green taxes, including a carbon tax; 2) the budgeting of all major environmental programs to include a transition scheme and revenue for transition purposes; and 3) investments from labour’s own investment funds (“Solidarity Funds”).

## **Pollution Prevention**

I now want to step back a bit. It strikes this outsider that the sunset program is not the prime key to Great Lakes water quality. The first stage should be a concerted and coordinated toxics use reduction program on the part of all jurisdictions that have an authority over Great Lakes water quality. Toxics use reduction programs such as those in Massachusetts, New Jersey, and Oregon have a proven track record in reducing emissions by sound pollution prevention methods. They, more than any other venture, have put us firmly on the path towards zero discharge. It is lamentable, therefore, that none of the jurisdictions surrounding the Great Lakes are at the top of the league table of toxics use reduction programs. Some have no legislated program at all. Why not ?

The situation in the United States is puzzling. The EPA has the clear constitutional power to make environmental laws for the whole country, allowing lower jurisdictions to make their own rules under conditions laid down by the federal government. But the Pollution Prevention Act, in a rare exception to the rule, does not do this. The result is a patchwork of state pollution prevention and toxics use reduction laws, some very good, most mediocre and a few terrible. I can only conclude that business pressure forced the United States into a weak and timid federal pollution prevention law.

The case of Canada is less clear and more complex, because the environmental powers of the federal government are weaker than in the United States. The result has been a pretense that the federal government is doing anything serious to make pollution prevention into a practical national goal. The CLC has proposed a division of federal and provincial responsibility over pollution prevention, which reflects political reality while urging the federal governments to institute economic instruments to promote a national standard of pollution prevention in the form of a uniform toxics use reduction program. Such a program would:

- Protect both the work environment - workers' health and safety - and the external environment at the same time ;
- Promote industrial efficiency as well as environmental protection: all toxics use reduction moves are cost-effective; they differ only in the payback time for the toxics use reduction investment;
- Be flexible and performance-based; unlike sunseting, it does not impose rigid and specific requirements on employers;
- Not be an all-or-nothing proposition; it mandates progressive changes instead of requiring a big initial step, and is therefore unlikely to leave us at square one after the program has been launched; and
- Enable workers to play a full part in the design and implementation of the program at the workplace level.

## **Dinner Speaker - Thursday October 23, 1998**

### **Dr. Hays Bell**

Vice President, Environment, Health and Safety, Eastman Kodak

#### **"Environmental Responsibility in the New Millennium"**

Good evening ladies and gentlemen. I'm pleased to address this important audience attending the 3rd State of the Lakes Ecosystem Conference. The Great Lakes are a valuable natural resource. As a member of the Council of Great Lakes Industries, Eastman Kodak Company (in particular, Kodak Park in Rochester, NY and Kodak Canada, in Toronto) are pleased to participate as stakeholders within the Great Lakes States and Provinces. We support the protection and responsible use of the natural environment of our Great Lakes Region knowing that a healthy and competitive regional economy is dependent on this environmental responsibility.

I am going to speak about Environmental Responsibility. First...how is it defined? I define "Environmental" in the broadest sense with a capital "E" to include health, safety, and environment. "Responsibility" is a duty and obligation that no one company, government, or organization can do alone, hence, it is a shared responsibility.

Today, the best way for a company to be environmentally responsible is to have an effective environment, health, & safety (EHS) management system in place. Many companies have effective EHS management systems; since I am from Kodak, I'll share Kodak's system with you.

Our EHS Management System at Kodak is one we're proud of. We have senior management support and we are structured to proactively address regulatory conformance worldwide and to quickly react to issues both at the Business Unit and Regional level. Additionally, our internal standards and procedures are utilized worldwide because it is not just complying with the law that matters - we realize this is a way to be successful at doing business.

As an industry, we have learned that the way we manage our health, safety, and environmental issues actually enables our business activities. The Business Value Chain is a traditional way of illustrating how a company adds value in the various stages of product and service delivery. Stop and think about some obvious examples of how EHS fits into the everyday routine of carrying out business activities...from procurement, manufacturing, and distribution, to

marketing, sales, and service. **The bottom line is that EHS enhances the way we look at and the way we do our business.**

Also, maintaining the vision is key to a company making responsible decisions. What is Kodak's "vision" of Environmental Responsibility? As a "photographic and imaging" company, it is especially important to us to project a world class "Environmental Image". Our obligation to the Environment not only impacts the sales of our products and perception by our customers, but also has a direct influence on costs associated with production and distribution of these products. So, we strive for continual improvement... every day... every month... every year. As we track our performance, we measure our progress - please review our annual EHS report for 1997 to see the progress for yourself.

When we think of how environmental responsibility is evolving, we think of pollution prevention versus pollution control. Today, the effective EHS management system is evolving beyond the "operations control" stage to one that is more "system" oriented - one that looks at the entire product life-cycle - from invention to end-of-life. A "product focus" versus "operations focus" approach.

The best way to learn this approach is to partner and learn from each other. Kodak has done just that:

We were very pleased to participate in EPA's Technology Transfer Project. This was a two-year voluntary project to evaluate a new EPA-developed test methodology and accompanying computerized software "tool kit." The result - potential hazards and waste can be avoided at the R&D stage of product development - pollution prevention in lieu of pollution control.

Kodak also participated in the development of the Green Chemistry Challenge, a program that is part of the U.S. EPA's Design for Environment initiative. The program promotes fundamental research in the development of chemistry and chemical synthetic processes that are safer and more environmentally responsible.

Environment Canada also offered some opportunities to industry. ARET stands for Accelerated Reduction and Elimination of Toxics and is a voluntary, non-regulatory program that targets 117 toxic substances including 30 that persist in the environment and may accumulate in developing organisms. ARET has long- and short-term goals and Kodak Canada has volunteered reductions in two categories. ARET is an important program because it is the precursor to the present Binational Toxics Strategy.

Partnering with Environmental Groups is also important. The World Wildlife Fund is one example. WWF increases the understanding of biodiversity issues through an education program called Windows on the Wild (WOW). WOW is a partnership among WWF, Kodak, schools, and the nation's nonformal educational institutions (including zoos, aquariums, nature centers, botanical gardens and museums). Since initiated, more than one million students, teachers, and members of the public have been exposed to this unique program. This program is unique not only in topic, but because it is an excellent example of an environmental group sharing expertise by forming a funding partnership with industry.

International Standards for environmental management are now available. These ISO 14000 standards are intended to provide organizations with the elements of an effective environmental management system and can be integrated with other existing management requirements. The

overall aim of the standards is to “support environmental protection and prevention of pollution in balance with socio-economic needs.” Consequently, many companies, including Kodak, have ISO 14001 registration goals.

And that brings us to another example of evolution - the “new” versus “traditional” business value chain.

The new Business Value Chain includes an “R&D” and “end of life” phase, in addition to procurement, manufacturing, distribution, marketing, and sales/service. Environment, Health, and Safety is an integral part of Kodak’s business value chain in that EHS functions enable these business activities and therefore contribute to our company’s success. I’ll use an example of Product Stewardship to illustrate how effective Environment, Health, and Safety Management can help a company achieve its business goals while being “environmentally responsible.”

Kodak’s single-use cameras (SUCs) were introduced in 1987 to meet the needs of a specific customer base - those who wanted an inexpensive camera to take pictures that might otherwise be missed. The quality of the pictures was outstanding and the cameras were an immediate success. Customers needed to return the entire product (containing the film) to the photofinisher in order to get their prints. Essentially, they used the camera a single time and “disposed” of it. Popular Science Magazine selected one of our single-use cameras for a “Best of What’s New” award for science and technology. Environmental groups however were calling the Kodak Fling camera “ecologically offensive.” While our new product was hugely successful, it did not measure up to Kodak’s own environmental benchmark - so it went back to the drawing board to begin one of the most successful worldwide efforts for redesign of a consumer product.

A Design for Environment activity occurred during the R&D stage that included elimination of the sonically welded camera to a redesign for easy disassembly - where the camera could be taken apart and the parts re-used to make new cameras. Procurement was engaged during the redesign of the camera body to include selection of a plastic that could be recycled to make new cameras or other products. Special labels were purchased - made from a material that has a high-quality printing and adhesion characteristic but that could also be reground and pelletized along with the front and back covers of the camera for recycling. Manufacturing adjusted their procedures so many small parts and the camera frame could be reused. Distribution channels were utilized to enable industry-level exchange partnerships and to enable our recycling programs worldwide. Additionally, the camera was and still is marketed with an eco-label, the Kodak e-mark, to bring attention to the product recycling program. Finally, the camera has significant end of life opportunities that include the intent that these cameras are designed to be recycled up to ten times.

Overall, the SUC program clearly enhanced Kodak’s sustainable development efforts, because it led to a formal “Design for Health, Safety & Environment” program to investigate the recycling and remanufacturing opportunities of all new products.

I mentioned earlier that environmental responsibility is a duty and obligation that no one company, government, or organization can do alone. This is evidenced by reviewing those activities that move us towards the future - a future with a product stewardship focus. Some activities that move us toward the future are:

- **academic research**  
provides the innovation for industry and business to invent new products
- **substance substitution**

- eliminating less friendly substances in new and existing product formulations
- **design for environment**
  - a pollution prevention practice that ultimately reduces the need for pollution control
  - sustainable development practices
  - making certain we address the needs of the future generations
- **leadership in EHS management**
  - the mechanism that not only enables regulatory compliance, but improvements in EHS performance as well
- **and an open dialog among all publics**
  - the only way to achieve this task is to work together and the best way to work together is to share information.

In summary, environmental responsibility today is a shared responsibility; one that is shared by business, government, academia, and other publics. We'll move environmental responsibility into the new millennium by taking steps together. For industry, it is not our satisfaction in performance that moves us to the future state. Rather, it is the progression of steps through good EHS management systems, partnerships, product stewardship programs, and acting on opportunities for continual improvement that moves us forward.

Speaking for members of the Council of Great Lakes Industries, I challenge all of us to work together to move toward the future, by getting better at Environmental Responsibility... every day... every month... every year.

Thank you.

Contributors: Linda J. Liszewski, HSE Issues Manager, Eastman Kodak Company;  
Sandra P. Walsh, Environmental Specialist, Kodak Canada, Inc.

# Appendix F. Participants List

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|----------------------------|--|--------------------------------------|
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| Vicki Barron               | Credit Valley Conservation                           |                                      |
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| R. Hays Bell               | Eastman Kodak Company                                |                                      |
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| James R. Bernard           | Green Mountain Institute for Environmental Democracy | jbernard@grnicd.org                  |
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| John P. Bleech             | West Valley Nuclear Services                         |                                      |
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